Hong Kong: Telecom/Broadcasting in Hong Kong

Alice Lai
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Market Overview

The market for telecom equipment in Hong Kong is a mature one. Its performance is closely linked to the pace of the industry's restructuring, which is dependent on emerging developments in China's telecom market and China's overall economic conditions. Full liberalization of Hong Kong's telecom market, robust growth in China's telecommunications market, as well as the proposed free trade pact Closer Economic Partnership Agreement (CEPA) augur well for the industry. U.S. telecom equipment is well recognized in Hong Kong and China's Pearl River Delta Region for its cutting-edge technology and reliability, but is considered to be relatively expensive. Best prospects for U.S. companies include: providing WLAN access points and related technology to Hong Kong due to the U.S's relatively developed authentication and security solutions, and exporting of telecom networking equipment such as co-axial cables and optic fiber cables via agents in Hong Kong to China.

Hong Kong's telecommunications industry is facing one of their biggest transformations in history. The government is determined to make Hong Kong a regional leader in the information technology field. The industry has started to rebound and has made Hong Kong increasingly important as a sourcing center for telecommunications equipment used in China. Sales of telecommunications equipment for 2005 in Hong Kong constitute a market valued at an estimated US$27.7 billion. The United States is the sixth largest supplier, supplying approximately three percent of Hong Kong's imports, following China, Japan, Taiwan, Korea and Singapore. It should be noted that these statistics do not capture U.S. exports of telecom networking equipment such as co-axial cables, optic fiber cables and switches, and they understate Hong Kong's telecom market for U.S. products.

Market Trends

The Hong Kong Government fully liberalized its telecommunications market in 2003 as outlined in its 1998 Review of Fixed Telecommunications and Television Policy report.

The fixed line market is very competitive. There are currently ten wireline Fixed Telecommunications Network Services (FTNS) licenses (PCCW-HKT, New World Telephone Limited, Wharf T&T Limited, Hutchison Global Crossing Limited, Hong Kong Broadband Network Ltd., Towngas Telecommunications Fixed Network., CM Tel. (HK) Ltd, TraxComm Ltd., HKC Network Ltd. and Hong Kong Cable Television Ltd. Opportunities for U.S. companies exist in providing new technology platforms such as Voice Over Internet Protocol (VOIP). The introduction of VOIP technology has significantly shrunk the volume of international calls being made over the fixed line network and has caused a dramatic reduction in IDD fees.

On the mobile telecommunications front, the market is saturated with six companies operating 11 networks. The three operators holding both GSM 900 and GSM 1800 licenses have integrated their networks and launched dualband services. In 2005, three operators had launched 3G networks. Currently, the market penetration of mobile phones in Hong Kong was estimated to be 121 percent, the highest in the world. Many companies have introduced data services such as Wireless Application Protocol (WAP) and many have plans to introduce more advanced data services, such as General Packet Radio Service (GPRS), to their networks. This will also create additional demand for network hardware and software, support services and consulting, and content services for U.S. companies.

Broadcasting provides more opportunities for U.S. companies providing content and digital TV technology to the channels. In 2005, total broadcasting revenue was estimated to be relatively small - around US$1.8 million. Industry sources predict revenues will continue to grow by 8% per year to 2010. About 40 domestic and regional TV channels are available to 2.2 million households. These include five Free-to-Air (FTA) commercial channels funded by advertising, 30 pay TV channels funded by subscriptions and other satellite channels. Television Broadcasts Ltd. and Asia Television Ltd. are the two domestic free television program services licensees. Hong Kong Cable Television Ltd., a domestic pay TV program services licensee carries over 30 channels. Other domestic pay TV program services licensees were granted to Yes Television, Hong Kong Network TV Ltd., Galaxy Satellite Broadcasting Ltd and Pacific Digital Media (HK) Corp. Ltd. PCCW Video-on-Demand (VoD) program offers viewers a choice of interactive multimedia services ranging from movies to interactive learning programs.

Major Telecom/Broadcasting Indictors

	Fixed-Line		Cellular Phone		Internet		Broadband Internet		Cable TV	
Population/ Households	# Of SS	P Rate (%)	# Of SS	P Rate (%)	# Of SS	P Rate (%)	# of SS	P Rate (%)	# Of SS	P Rate (%)
7M/ 2.2M	3.8 M	54.5%	8.4M	121%	4M	57%	1.6M	23%	720,000	33%

Notes: M - Millions, SS - Subscribers, P - Penetration, and HH - Households.

Networks

Of the 1.6 million broadband subscribers in 2005, half of them (about 800,000) are asymmetrical digital subscriber line (ADSL) subscribers. PCCW Netvigator was the dominant ADSL broadband service provider, offering both wholesale and retail services to the market. As for wireless broadband, trial of Internet access using Local Multipoint Distribution System (LMDS) have been run by Smartone and City Telecom to provide internet access through their own wireless networks. It is yet to be determined whether this technology of transmitting voice and data via microwave signals directly to roof-top receivers will have a similar quality of transmission as that of offered through fixed line. It should also be noted that PCCW formed a partnership with Intel to develop WiMAX technology as a broadband access option for the wholesale and retail markets.

In terms of fixed –mobile convergence, PCCW has explored how to fill the gap between broadband and mobility and noted that systems such as WiMax can offer broadband speeds of up to 14Mb/S if converged with 3G. Users can talk and view multimedia content from the two networks on a single mobile phone using one number only.

Regulatory Regime; Standards

Except class licenses, all licenses to individual users are subject to renewal. For users (3G and 2G operators) who pay the spectrum utilization fee (SUF), they are given the right to use the assigned frequencies for a period similar to the validity period of most licenses, i.e. 15 years. Other frequency users must pay an annual license fee to Office of the Telecommunications Authority (OFTA). Once the license fee is paid, they are usually allowed to continue the use of the frequencies specified in the license. However, under section 32I of the Telecommunications Ordinance, the Telecommunications Authority may withdraw or vary the frequency assignments of the non-SUF users by giving reasonable prior notice of withdrawal. OFTA usually gives one to three years prior notice in such cases.

OFTA adopts a technology-neutral approach. However, OFTA does specify the technical standards in the schedule of licenses. The licensee may request OFTA for changes to the technical standard in the schedule. OFTA will generally approve changes as long as the standard to be used is an open and non-proprietary standard (e.g. regional standard or international standard).

Spectrum users are required to pay license fees. OFTA determines the license fee level by calculating the amount necessary to recover OFTA's administrative costs. These administrative costs include licensing, clearing interference, enforcement against illegal radio uses, and various other administrative activities.

No fees are required for the following use of the frequencies:
(a) frequencies/uses exempted under the relevant exemption orders under the Telecommunications Ordinance.
(b) frequencies/uses licensed under the class licenses created under the Telecommunications Ordinance.

It is OFTA's stated objective to encourage the efficient use of the radio frequency spectrum. One way OFTA achieves this objective is by allocating spectrum in a manner that allows access for all potential spectrum users. In this way, multiple users can share use of the same spectrum space. Under the exemption orders of the Telecommunications Ordinance, OFTA has exempted a number of frequency bands for various applications including radio frequency identification, industry, scientific and medical applications, cordless telephones, low power devices, mobile satellite services, WiFi, 409 MHz walkie talkies, etc. OFTA is currently conducting a public consultation on creating a licence to open the use of 27 MHz Citizens Band Radios.

This year, the Hong Kong government is also conducting a review of the spectrum policy. One specific review is studying how to encourage more efficient use of spectrum through market-based incentives such as spectrum auctioning and trading. The review is scheduled for completion before mid-2006.

Best Prospects

U.S. companies such as Intel and Cisco have advantages in WLAN deployment due to viable authentication solutions. A recent report by Pyramid Research notes that mobile carriers are looking for opportunities to deploy WLAN as a way to find sustainable new revenue sources. Although revenue models are still being tested and a viable public WLAN business model has yet to emerge, major fixed line carriers in Hong Kong such as Pacific Century CyberWorks (PCCW) deploying WLAN. PCCW has installed approximately 130 802.11b hot spots around Hong Kong and is using WLAN access points manufactured by Intel. In addition, U.S. companies have excellent prospects in WLAN deployment in Macau. A relatively small number of WLAN access points can already cover the whole Macau market (Macau's population size of 437,600) .

Other best prospects include broadband technology, system integration services, network management software and services, telecommunications equipment such as switches and other transmission equipment, network hardware including routers and storage devices, application software as well as content and digital TV technology for TV channels.

Distribution Channels

Appointing agents and distributors and finding joint venture partners are the most common channels

Barriers to Entry

From Jan 1, 2003, the local and external Fixed Telecommunication Network Services (FTNS) markets were fully liberalized and there have been no pre-set limit of the number of licenses for the operation of local wireline-based fixed networks.

For More Information

The U.S. Commercial Service in Hong Kong can be contacted via e-mail at: [alice.lai@mail.doc.gov]; Phone: [852-2521-4638]; Fax: [852-2845-9800] or visit our website: www.buyusa.gov/hongkong

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